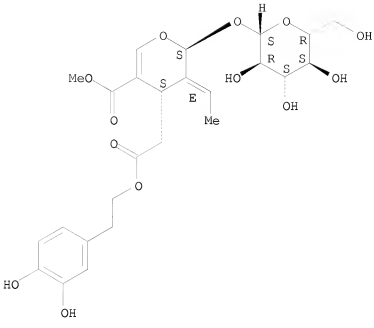
```
=> e oleuropein/cn
E1            1     OLEUM SINAPIS/CN
E2            1     OLEUROPEIC ACID/CN
E3            1 --> OLEUROPEIN/CN
E4            1     OLEUROPEIN AGLYCON/CN
E5            1     OLEUROPEIN AGLYCONE/CN
E6            1     OLEUROPEIN PERACETATE/CN
E7            1     OLEUROPEINDIAL/CN
E8            1     OLEUROPEINE/CN
E9            1     OLEUROPEINE AGLYCONE/CN
E10           1     OLEUROPEINIC ACID/CN
E11           1     OLEUROPEOSIDE/CN
E12           1     OLEUROSIDE/CN

=> s e3
L1            1 OLEUROPEIN/CN

=> d

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   32619-42-4  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   2H-Pyran-4-acetic acid, 3-ethylidene-2-(β-D-glucopyranosyloxy)-3,4-
     dihydro-5-(methoxycarbonyl)-, 2-(3,4-dihydroxyphenyl)ethyl ester,
     (2S,3E,4S)-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   2H-Pyran-4-acetic acid, 3-ethylidene-2-(β-D-glucopyranosyloxy)-3,4-
     dihydro-5-(methoxycarbonyl)-, 2-(3,4-dihydroxyphenyl)ethyl ester,
     [2S-(2α,3E,4β)]-
CN   2H-Pyran-4-acetic acid, 5-carboxy-3-ethylidene-2-(β-D-glucosyloxy)-
     3,4-dihydro-, 3,4-dihydroxyphenethyl 5-methyl ester (7CI)
CN   Oleuropein (8CI)
OTHER NAMES:
CN   Oleoeuropein
CN   Oleoeuropeine
CN   Oleuropeine
FS   STEREOSEARCH
DR   163436-64-4, 1392-73-0, 37341-33-6, 4809-64-7, 30675-34-4
MF   C25 H32 O13
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA,
       CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU,
       EMBASE, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, SCISEARCH, TOXCENTER,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.  Rotation (-).
Double bond geometry as shown.
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

680 REFERENCES IN FILE CA (1907 TO DATE)
29 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
686 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	7.61	7.82

FILE 'CAPLUS' ENTERED AT 23:31:29 ON 11 DEC 2008
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FILE COVERS 1907 - 11 Dec 2008 VOL 149 ISS 24
FILE LAST UPDATED: 10 Dec 2008 (20081210/ED)

Caplus now includes complete International Patent Classification (IPC)

reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/legal/infopolicy.html

```
=> s l1
L2         686 L1

=> s bone or osteo?
        239593 BONE
         24987 BONES
        246633 BONE
                (BONE OR BONES)
         93673 OSTEO?
L3      279402 BONE OR OSTEO?

=> s l2(l) l3
L4           4 L2(L) L3

=> d ibib abs 1-4

L4   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2008:1157500  CAPLUS <<LOGINID::20081211>>
DOCUMENT NUMBER:          149:394709
TITLE:                    Methods and compositions for promoting bone and joint
                          health
INVENTOR(S):              Tripp, Mathew L.; Konda, Veera; Desai, Anu; Hall, Amy
                          J.; Bland, Jeffrey
PATENT ASSIGNEE(S):       Metaproteomics, LLC, USA
SOURCE:                   PCT Int. Appl., 59pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     WO 2008115783        A1    20080925    WO 2008-US56980        20080314
         W:  AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
     US 20080242690       A1    20081002    US 2008-48613          20080314
PRIORITY APPLN. INFO.:                     US 2007-918727P     P  20070319
AB   Methods and compns. that can be used to promote bone and joint health
     through amelioration, stabilization and repair of damage associated with
     various pathophysiol. conditions are disclosed.
REFERENCE COUNT:          3     THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
```

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:962065 CAPLUS <<LOGINID::20081211>>
DOCUMENT NUMBER: 149:377474
TITLE: Olive: native of Mediterranean region and health benefits
AUTHOR(S): Omar, Syed Haris
CORPORATE SOURCE: Pharmacy Department, Sebai Institute of Health Sciences, Jeddah, 21514, Saudi Arabia
SOURCE: Pharmacognosy Reviews (2008), 2(3), 135-142
CODEN: PRHEEV; ISSN: 0973-7847
URL: http://www.phcog.net/reviews/issue3/14.pdf
PUBLISHER: Al-Ameen College of Pharmacy
DOCUMENT TYPE: Journal; General Review; (online computer file)
LANGUAGE: English
AB A review. The Olive tree (Olea europaea) is native to the Mediterranean region, tropical & central Asia and various parts of Africa. It is an integral ingredient of the diet in the form of whole fruit or oil in the countries surrounding the Mediterranean Sea. The constituents of olive categorized into major and minor components. Major component of olive oil consist of oleic acid (Triglycerides) and a large number of minor components includes phenolic constituents, squalene, α-tocopherol and sterols having great importance and beneficial to human health. The main phenolics include hydroxytyrosol, tyrosol, and oleuropein, which occur in highest levels in virgin olive oil and have demonstrated antioxidant activity. Many studies have been conducted to prove its potential through oil, whole fruit and leaf extract as cardiovascular disorders and anti-oxidant, gastroprotective effect, osteoprotective effect, endocrine effect, immunomodulatory effect, anti-cancer, anti-viral and anti-microbial effects.
REFERENCE COUNT: 107 THERE ARE 107 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1019313 CAPLUS <<LOGINID::20081211>>
DOCUMENT NUMBER: 146:61754
TITLE: Dose-response study of effect of oleuropein, an olive oil polyphenol, in an ovariectomy/inflammation experimental model of bone loss in the rat
AUTHOR(S): Puel, Caroline; Mathey, Jacinthe; Agalias, Apostolis; Kati-coulibaly, Seraphin; Mardon, Julie; Obled, Christiane; Davicco, Marie-Jeanne; Lebecque, Patrice; Horcajada, Marie-Noelle; Skaltsounis, Alexios L.; Coxam, Veronique
CORPORATE SOURCE: Unite des Maladies Metaboliques et Micronutriments, INRA Theix, Saint Gene` s-Champanelle, 63122, Fr.
SOURCE: Clinical Nutrition (2006), 25(5), 859-868
CODEN: CLNUDP; ISSN: 0261-5614
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background & aims: This study was carried out to assess the dose-dependent bone-sparing effect of oleuropein, an olive oil phenolic compound with anti-inflammatory and anti-oxidative properties, on bone loss induced by talc granulomatosis in estrogen-deficient rat. Methods: Among 98 rats, 20 were sham-operated (SH) while the others (78) were ovariectomized (OVX). The SH and 26 OVX rats (controls) were given a standard diet for 100 days.

The 52 remaining OVX rats were allocated to 4 groups that received oleuropein at 2.5, 5, 10 or 15 mg/kg body weight per day for 100 days. Three weeks before necropsy, an inflammation was induced by s.c. injections of talc in half of the SH and OVX rats and in all oleuropein-treated animals. Results: Castration was associated with a decreased bone mineral d. (BMD). In OVX rats, inflammation, characterized by an increase of the spleen weight and plasma fibrinogen levels, exacerbated this bone loss, as shown by values of BMD of the total femur metaphyseal and diaphyseal subregions. The 4 doses of oleuropein reduced bone loss and improved inflammatory biomarkers excepted for 5 mg/kg BW. Conclusions: Every dose of oleuropein elicited protective effects on bone mass in this model of ovariectomy associated with inflammation, probably by modulating inflammatory parameters.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:637006 CAPLUS <<LOGINID::20081211>>

DOCUMENT NUMBER: 141:331359

TITLE: Olive oil and its main phenolic micronutrient (oleuropein) prevent inflammation-induced bone loss in the ovariectomised rat

AUTHOR(S): Puel, C.; Quintin, A.; Agalias, A.; Mathey, J.; Obled, C.; Mazur, A.; Davicco, M. J.; Lebecque, P.; Skaltsounis, A. L.; Coxam, V.

CORPORATE SOURCE: Unite des Maladies Metaboliques et Micronutriments, INRA Theix, Saint Genes-Champanelle, 63122, Fr.

SOURCE: British Journal of Nutrition (2004), 92(1), 119-127 CODEN: BJNUAV; ISSN: 0007-1145

PUBLISHER: CABI Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The present study was designed to evaluate the effect of olive oil and its main polyphenol (oleuropein) in ovariectomized rats with or without inflammation. Rats (6 mo old) were ovariectomized or sham-operated as control. Ovariectomized rats were separated into three groups receiving different diets for 3 mo: a control diet with 25 g peanut oil and 25 g rapeseed oil/kg (OVX), the control diet with 50 g olive oil/kg or the control diet with 0.15 g oleuropein/kg. The sham-operated group was given the same control diet as OVX. Inflammation was induced 3 wk before the end of the experiment by s.c. injections of talc (magnesium silicate) in one-half of each group. The success of ovariectomy was verified at necropsy by the atrophy of uterine horns. Inflammation, oleuropein or olive oil intakes did not have any uterotrophic activity, as they had had no effect on uterus weight The plasma concentration of α-1-acid glycoprotein (an indicator of inflammation) was increased in OVX rats with inflammation. With regard to bone variables, osteopenia in OVX was exacerbated by inflammation, as shown by a decrease in metaphyseal and total femoral mineral d. Both oleuropein and olive oil prevented this bone loss in OVX rats with inflammation. At necropsy, oleuropein and olive oil consumption had had no effect on plasma osteocalcin concns. (marker of bone formation) or on urinary deoxypyridinoline excretion (marker of bone resorption). In conclusion, oleuropein and olive-oil feeding can prevent inflammation-induced osteopenia in OVX rats.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s inflamm
=> s inflamm?

```
L1      334912 INFLAMM?

=> s osteoporosis
L2       24194 OSTEOPOROSIS

=> s l1 (l) l2
L3        1357 L1 (L) L2

=> s l3 and PY<2003
     22961984 PY<2003
L4         478 L3 AND PY<2003

=> s olive
         36402 OLIVE
          2655 OLIVES
L5       36812 OLIVE
                (OLIVE OR OLIVES)

=> s l4 and l5
L6           1 L4 AND L5

=> d ibib abs hit

L6   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         1998:112212  CAPLUS <<LOGINID::20081213>>
DOCUMENT NUMBER:          128:145372
ORIGINAL REFERENCE NO.:   128:28513a,28516a
TITLE:                    Capsules for oral preparations and capsule
                          preparations for oral administration
INVENTOR(S):              Tanida, Norifumi; Aoki, Jun; Nakanishi, Masaru
PATENT ASSIGNEE(S):       Hisamitsu Pharmaceutical Co., Inc., Japan; Tanida,
                          Norifumi; Aoki, Jun; Nakanishi, Masaru
SOURCE:                   PCT Int. Appl., 43 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     WO 9805310           A1    19980212    WO 1997-JP2686         19970801 <--
         W:  CN, KR, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     JP 10152431          A     19980609    JP 1997-207720         19970801 <--
     EP 919228            A1    19990602    EP 1997-933882         19970801 <--
         R:  CH, DE, DK, ES, FR, GB, IT, LI, SE, IE
     CN 1226822           A     19990825    CN 1997-196936         19970801 <--
     CN 1088584           C     20020807
     KR 2000029784        A     20000525    KR 1999-700905         19990202 <--
     US 6214378           B1    20010410    US 1999-230844         19990308 <--
PRIORITY APPLN. INFO.:                       JP 1996-205027      A  19960802
                                             WO 1997-JP2686      W  19970801

AB   The invention relates to capsules for oral prepns. useful for colon
     diseases such as colon cancer, ulcerative colon inflammation,
     constipation and diarrhea, and systemic diseases such as
     osteoporosis which undergo no changes in the stomach and small
     intestine but, after getting to the large intestine, disintegrate and
     quickly liberate the drugs encapsulated therein at the same time.  These
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capsules have the base which is made from hydroxypropylmethylcellulose (HPMC) optionally containing polyethylene glycol, gelatin or catechin. On the surface of the capsule base in which a powder or liquid containing physiol. active substance(s) is encapsulated, there is formed a double-coating structure consisting of the inner layer made from a cationic copolymer and the outer layer made from an anionic copolymer.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

PI WO 9805310 A1 19980212

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 9805310	A1	19980212	WO 1997-JP2686	19970801	<--
	W: CN, KR, US					
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	JP 10152431	A	19980609	JP 1997-207720	19970801	<--
	EP 919228	A1	19990602	EP 1997-933882	19970801	<--
	R: CH, DE, DK, ES, FR, GB, IT, LI, SE, IE					
	CN 1226822	A	19990825	CN 1997-196936	19970801	<--
	CN 1088584	C	20020807			
	KR 2000029784	A	20000525	KR 1999-700905	19990202	<--
	US 6214378	B1	20010410	US 1999-230844	19990308	<--

AB The invention relates to capsules for oral prepns. useful for colon diseases such as colon cancer, ulcerative colon inflammation, constipation and diarrhea, and systemic diseases such as osteoporosis which undergo no changes in the stomach and small intestine but, after getting to the large intestine, disintegrate and quickly liberate the drugs encapsulated therein at the same time. These capsules have the base which is made from hydroxypropylmethylcellulose (HPMC) optionally containing polyethylene glycol, gelatin or catechin. On the surface of the capsule base in which a powder or liquid containing physiol. active substance(s) is encapsulated, there is formed a double-coating structure consisting of the inner layer made from a cationic copolymer and the outer layer made from an anionic copolymer.

IT Bile acids
Cottonseed oil
Gelatins, biological studies
Olive oil
Polyoxyalkylenes, biological studies
Safflower oil
Soybean oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(capsules for oral prepns. and capsule prepns. for oral administration)